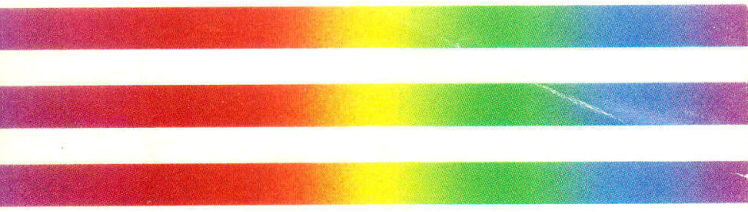


Introduce yourself to Amiga.

The first personal computer that gives you a creative edge.

Enter a new world of speed and power, a dazzling universe of color and dimension. Unmatched by other personal computers at any price.

Enter the world of Amiga.™ And experience the first personal computer to give you a creative edge in business, the arts, education and technology.

There's never been a smarter personal computer. Amiga is unmatched feature for feature. Graphics, animation and sound unseen and unheard of in a personal computer until now. Power, speed and agility that leave all others behind.

There's never been a personal computer that's easier to use. In fact, Amiga lets you choose the way you want to use it. Use symbols instead of complicated commands or strange codes, by just pointing the Amiga "mouse" at pictures of whatever you want to do. Or choose to enter your command through the keyboard, an 89-key detached console with 10 function keys, directional cursor keys and a numeric keypad for large-scale data entry.

There's never been a computer this useful. Amiga will be your number cruncher, filing system, audio-visual department, graphic designer, print shop. And friend. For life.

Amiga. Experience its creativity and you won't wonder what you'd do with a computer. You'll wonder how you ever lived without Amiga.

NOW YOU'VE GOT THE POWER.

It's being hailed as the vanguard of a new powerful era in personal computing and Amiga takes you there.

At the heart of the Amiga is a Motorola-68000 microprocessor, a 16-bit processor with many attributes of a 32-bit MPU.

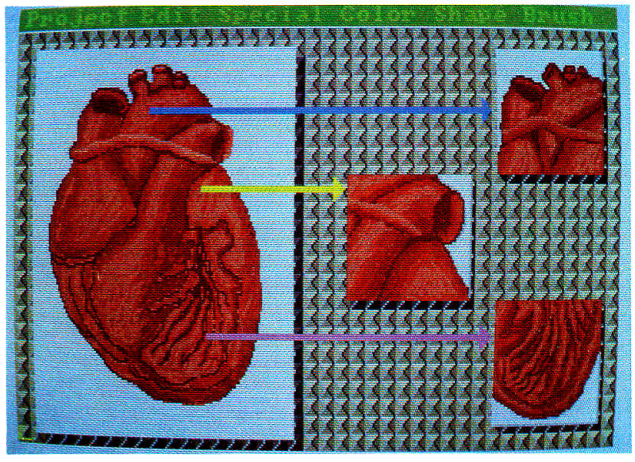
The 68000 data-handling capabilities provide incredible power. Not only can it handle data in byte-size eight-bit chunks but it can deal with words of 16 bits in length or long words of 32 bits. In one single instruction the 68000 can flex four times more muscle than the equivalent of an eight-bit microprocessor.

How about enough power to run the average spreadsheet, database and word processing file all at the same time and still have room for more. The Amiga can be expanded to accommodate up to a whopping 8 megabytes of memory.

That's for starters. But Amiga has magic. In a set of three custom VLSI chips that act as powerful co-processors and set the Amiga apart from any personal computer ever made. Using their own Direct Memory Access channels these chips can autonomously operate Amiga's graphics, animation, sound generation, disk I/O and peripheral control without taxing the 68000 which can keep crunching numbers at full speed.

Amiga has 256K of internal RAM and 256K of writable control store. For those requiring more memory, a 256K RAM pack can easily be added to boost memory to a full 512K. In addition, as standard equipment, the Amiga sports an internal 3.5″disk drive that accommodates double-sided, double-density disks with a capacity of 880K.

The Amiga and the 68000 together mark the entry of home microcomputing into the era of 16-bit microprocessing power.



	Commodore AMIGA	Apple MACINTOSH	IBM PC	IBM PC AT
Base RAM:	256K	128K	256K	256K
Expandable RAM Internal	512K	512K-board exchange	640K	3MB
External	8MB	not avail.	not appl.	not appl.
Base ROM	256K*	64K	40K	64K

*The initial Amiga 1000s will have a write protectable block of 256K additional RAM and a bootstrap ROM as a substitute for the 256K ROM. Therefore, the total system RAM is 512K expandable to 768K RAM internally.

NOW YOU'VE GOT THE SPEED.

When it comes to speed, Amiga can really sizzle. The Amiga's 68000 runs at 7.16 MHz. Its 68000 microprocessor can crunch numbers more speedily than you can input them. And access speed is lightning fast.

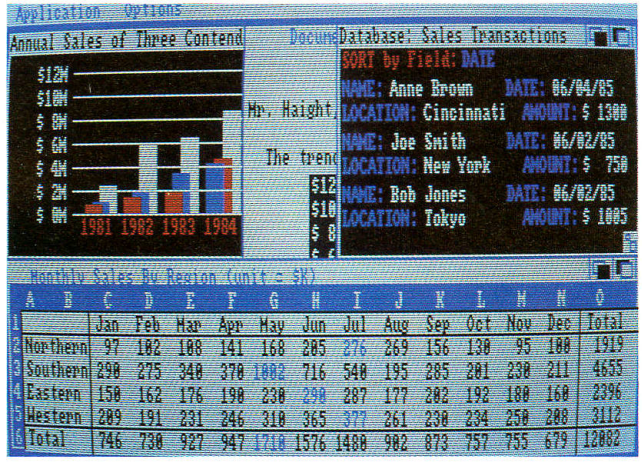
Two reasons explain Amiga's superiority. The 68000 CPU is the first. It handles 32 bits of data at a time and funnels input and output at 16 bits at a time. By comparison, the IBM PC has half the capacity.

The second reason can be found in Amiga's three custom chip co-processors. They contain 25 DMA channels able to move data through RAM while bypassing the normal CPU and input/output channels ordinary computers must rely on.

Such a system greatly enhances the processor speed, allowing the microprocessor to devote almost all of its time to computing. And it sets new standards in productivity.

Consider that Amiga will print your cover memo and make a bar graph while you're still using a word processor. And there's probably enough power left over to receive a phone message or stock quote over a modem at the same time.

What's more, Amiga will do all these things at once in separate windows. Not just display them. Work on them. No other personal computer can.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Northern	97	102	108	141	168	205	276	269	156	130	95	108	1919
Southern	290	275	340	370	1002	716	540	195	285	201	230	211	4655
Eastern	150	162	176	198	230	290	287	177	202	192	180	160	2396
Western	209	191	231	246	310	365	377	261	230	234	250	208	3112
Total	746	730	927	947	1710	1576	1480	902	873	757	755	679	12082

	Commodore AMIGA	Apple MACINTOSH	IBM PC	IBM PC AT
Processor	68000	68000	8088	80286
Clock Speed	7.16 MHz	7 MHz	4.77 MHz	6 MHz

NOW YOU'VE GOT MULTI-TASKING.

Running several programs at the same time is one of the most innovative features of the Amiga's disk operating system.

Any combination of tasks, from the simplest to the most complex, can all be running simultaneously in its own window, even using different colors and resolutions.

The multiprocessing capabilities of the Amiga even accommodate several programs running under different priorities, assigning ordinary tasks to the background. You can recalculate a spreadsheet in one background, do a data base sort in another and continue to work on a third program without even noticing that work is being done in the background.

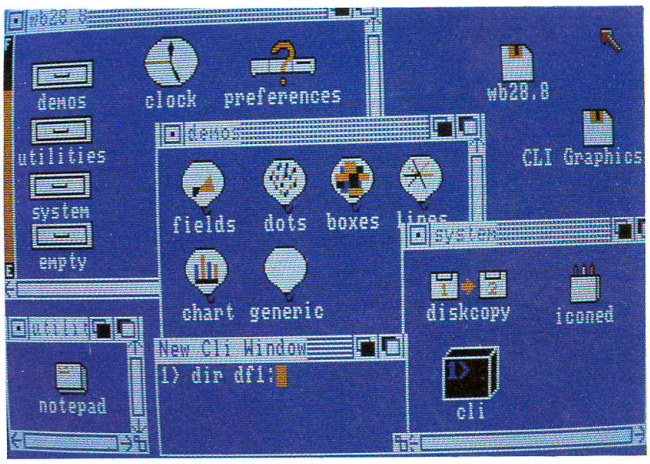
Multiple Amiga programs, even those in windows overlapped or completely hidden, don't sit there and wait for your attention. They're fully operational, all functions active, running on their own. Each program opens its own terminal giving it access to all the systems resources.

The user interface for Amiga is called Intuition.™ And it manages a complex windowing system. Intuition uses screens and all screens have pull-down menus. Windows which appear within screens can support all of the Amiga's outstanding graphics, text and animation features.

Amiga's memory is capable of holding many different software application programs. Now you don't have to run programs one at a time. No other personal computer can match the Amiga for increasing your personal productivity.

This full-performance system is the epitome of single-station multi-tasking.

™Intuition is a trademark of Commodore-Amiga, Inc.



SOFTWARE:	Commodore AMIGA	Apple MACINTOSH	IBM PC	IBM PC AT
Operating System	Amiga DOS	Mac. Op. Sys.	PC-DOS	PC-DOS XENIX
Window Environment	Workbench	Desktop	Top View (option)	Top View (option)
Command Line Interface	Yes	No	Yes	Yes
Multitasking	Yes	No	No	option
MS-DOS Compatible	Yes	No	Yes	Yes
Hard Disk DOS Support	Yes	3rd party	Yes	Yes

NOW YOU'VE GOT THE GRAPHICS.

With a choice of 4,096 available colors to work from, it's no wonder that amazing graphics are such a predominant feature of the Amiga.

There are two resolution modes. A low resolution mode using up to 32 colors at one time that matches most computers' highest resolution mode. And a high resolution mode capable of using any 16 colors at one time. Both modes also call upon seven layers of sprites and a custom graphics chip that enables high-speed animation without cutting into the 68000's working speed.

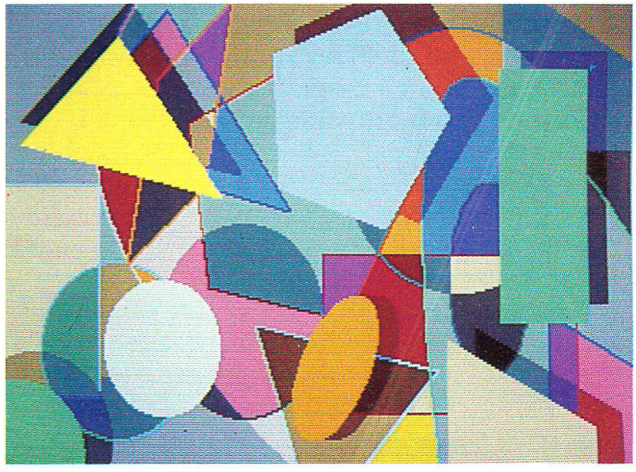
Nothing manipulates color and movement like the Amiga can. Lines can be drawn at an incredibly fast one million pixels per second.

The graphics systems on the Amiga are handled through the use of "pull down" screens. A palette containing the color choices available can be pulled down onto the screen at any time. This allows you to select colors and features directly from the palette rather than constantly having to refer to the main menu.

The animation routines that exist in Amiga's ROM provide the users with the most sophisticated color animation the personal computer market has ever seen. Characters interact with each other. It brings your imagination and your creations to life.

You can customize text fonts and have complete control over their color. With a limitless array of font, color and dimension possibilities you can create your own ads, cartoons, logos, brochures. With CAD (Computer Aided Design) abilities built into the Amiga, anything you can dream up, you can design or invent on Amiga.

The Amiga can do it sharper, faster, easier, in more detail with more colors and in more ways than any other personal computer made.



TEXT DISPLAY:	Commodore AMIGA	Apple MACINTOSH	IBM PC	IBM PC AT
Maximum Resolution	640x400	512x342	640x200	640x200
# of Colors/ Palette	16/4096	None	2/64	2/64
Medium Resolution	320x200	512x342	320x200	320x200
# of Colors/ Palette	32/4096	None	4/64	4/64
Graphic Co-processor	Yes	No	No	No
Interlaced Video	Yes	No	No	No
RGB Analog	Yes	No	No	No
RGB Digital	Yes	No	Yes	Yes
Composite	Yes	No	No	No
Sprites/ Bit planes	8/8	0/1	0/1	0/1

NOW YOU'VE GOT THE SOUND.

With Amiga you've got more than just sound. Its existing audio system far surpasses that of any microcomputer.

The sound synthesizer supports four voices which are routed to stereo output jacks. Each channel has its own 8-bit digital to analog converter driven by a DMA channel. Each can produce sounds in a range of about 20-7500kHz and has its own 6-bit volume control for 64 volume levels.

Digital sound can create a variety of different musical instruments, play them singly or orchestrate them into a full musical score with a sound that matches studio quality.

Each voice has an 8 to 9 octave range, and bass response exceeds that of most stereo systems.

In addition to synthesized sound, the system supports the reproduction of recorded sound using a digital sampling technique. You can play music into the Amiga, have the software write the score for you, and go back to edit the score.

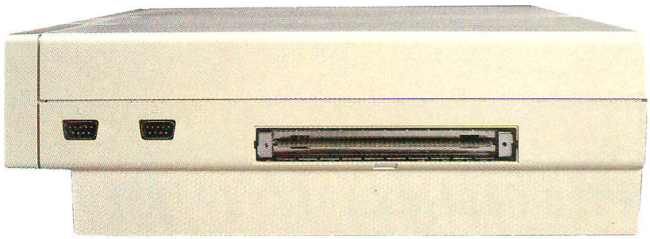
Amiga easily matches the quality of commercial synthesizers and will be able to interface with the most advanced electronic instruments.

Amiga can play along with you as well. The program listens to what you are playing and adjusts itself in real time. If you slow down, Amiga slows down. It's as though you are playing the lead and another musician is accompanying you on another instrument.

Speech synthesis can easily reproduce a clearly understood male or female voice with an unlimited vocabulary in the English language.

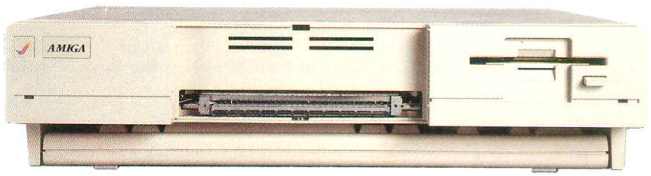
Up until now, sound may never have been a high priority in a personal computer. But up until now, there's never been a personal computer like Amiga.

Graphics	Commodore AMIGA	Apple MACINTOSH	IBM PC	IBM PC AT
Co-processor	Yes	No	No	No
# Voices/ Stereo	4/Yes	4/No	1/No	1/No
Built-in Voice Synth.	Yes	No	No	No



Side with expansion bus open. The expansion bus makes it easy to add memory boards to Amiga up to an incredible 8 megabytes. The bus also means that Amiga is open to many other peripherals, including a laser disk controller, a home monitoring unit and much more.

Back ports. Left to right are the keyboard ports; parallel printer port for high-speed printing; a port for additional disk drives; a serial port for modems, serial printers or a Midi keyboard interface; left and right speaker ports; an RGB high resolution monitor port (which can also be used to add a Genlock to interface Amiga with your VCR or video camera, or as a port for a Frame-grabber/Digitizer); a port that lets you use your TV monitor, and a standard monitor port.



Front expansion slot open. The Amiga is built with "open architecture." There's room for expansion, plenty of ports and easy accessibility. The front of the machine opens so that the 256K expansion module snaps in place in less time than it takes to read this page.

"The real message to come away with is that the Commodore Amiga is a new communications medium—a dream machine. Its display is crystal clear—better than any I have ever seen, in any graphics mode. Its sound far surpasses that of any microcomputer that has come before. Its multitasking computing power and open-ended RAM capability make it a Herculean muscle machine."

John J. Anderson
Creative Computing

"The Amiga is a very exciting product. Its combined capabilities in speed, memory access, multi-tasking, sound synthesis, color graphics and video synchronization, represent a breakthrough in technology that puts the Amiga a generation ahead of its competition."

Egil Juliensen, Chairman
Future Computing Inc.

"The Amiga will revolutionize the home computer industry. The software we're developing for the Amiga will blow your socks off with fantastic animation and sound. We think the Amiga helps fulfill the promise of personal computing, and will give Electronic Arts and the entire industry a very bright future."

Trip Hawkins, President
Electronic Arts

FEATURES

	Commodore AMIGA	Apple MACINTOSH	IBM PC	IBM PC AT
POWER:				
Processor	68000	68000	8088	80286
Clock Speed	7.16 MHz	7 MHz	4.77MHz	6 MHz
Processor/Word Size	16/32	16/32	8/16	16/24
KEYBOARD:				
Total Keys	89	58	83	84
Data Entry Pad	Yes	Optional	Yes	Yes
Function Keys	10	0	10	10
Cursor Control	Yes	No	Yes	Yes
Help Key	Yes	No	No	No
GRAPHICS:				
Text Display				
Maximum Resolution	640 x 400	512 x 342	640x200	640x200
# of Colors/Palette	16/4096	None	2/64	2/64
Medium Resolution	320 x 200	512 x 342	320x200	320x200
# of Colors/Palette	32/4096	None	4/64	4/64
Graphic Co-processor	Yes	No	No	No
Interlaced Video	Yes	No	No	No
RGB Analog	Yes	No	No	No
RGB Digital	Yes	No	Yes	Yes
Composite	Yes	No	No	No
Sprites/Bit Planes	8/8	0/1	0/1	0/1
SOUND:				
Co-processor	Yes	No	No	No
# Voices/Stereo	4/Yes	4/No	1/No	1/No
# Octaves	9			
Complex Waveforms	Yes #	Yes **	Yes ***	Yes ***
Amplitude and Freq. Modulation	Yes #	Yes **	No	No
Built-in Voice Synth.	Yes	No	No	No
INPUT/OUTPUT:				
Bus Expansion	Yes	No	Yes	Yes
RGB/RGBI Port	Yes	No	Optional	Optional
Composite Video Port	Yes	No	Optional	Optional
TV Output	Optional	No	Optional	Optional
Mouse/Joystick Ports	2	1	Optional	Optional
Parallel	Yes	No	Optional	Optional
Serial	Yes	Yes	Optional	Optional
Genlock	Optional			
Framegrabber	Optional		3rd Party	3rd Party
Midi	Optional	3rd Party		
DISK STORAGE:				
Capacity	880K	400K	360K	1.2MB
Size	3.5"–5.25" option	3.5"	5.25"	5.25"
Maximum # of Drives	4	2	2	2
SOFTWARE:				
Operating System	Amiga DOS	Mac. Op. Sys.	PC-DOS	PC-DOS/XENIX
Window Environment	Workbench	Desktop	Top View (Option)	Top View (Option)
Command Line Interface	Yes	No	Yes	Yes
Multitasking	Yes	No	No	option
MS-DOS Compatible	Yes	No	Yes	Yes
Hard Disk DOS Support	Yes	3rd Party	Yes	Yes

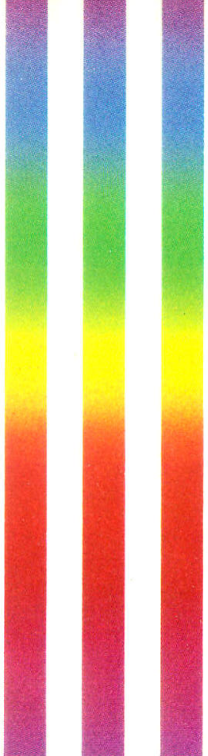
Amiga is a trademark of Commodore-Amiga, Inc.

*The initial Amiga 1000s will have a write protectable block of 256K additional RAM and a bootstrap ROM as a substitute for the 256K ROM. Therefore, the total system RAM is 512K expandable to 768K RAM internally.

#The AMIGA has 4 hardware audio DMA channels, which feed 2 stereo output ports. The processor is not accessed for sound generation.

**The MACINTOSH has 4 software driven voices which use over 50% of the processor's time. ***The IBMs have 1 voice which is software driven.

Optional–option is available from the manufacturer. 3rd Party–option is available through third party company.



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